

Title (en)

LINEAR OPTICAL SAMPLING SYSTEM AND COHERENT DETECTION OF AN OPTICAL SIGNAL

Title (de)

SYSTEM ZUR LINEAREN OPTISCHEN ABTASTUNG UND KOHÄRENTEN ERKENNUNG EINES OPTISCHEN SIGNALS

Title (fr)

SYSTÈME D'ÉCHANTILLONNAGE OPTIQUE LINÉAIRE ET DE DÉTECTION COHÉRENTE D'UN SIGNAL OPTIQUE

Publication

EP 3200363 B1 20191002 (FR)

Application

EP 16305074 A 20160127

Priority

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Abstract (en)

[origin: WO2017129755A1] A system for optical linear sampling and coherent detection of an optical signal OS comprises a source emitting a pulsed optical signal SP and an optical coupler that splits the pulsed optical signal SP into two replicas, the first replica of the pulsed optical signal SP is sent to a first optical hybrid circuit and the second replica of the pulsed optical signal SP is sent to a second optical hybrid circuit, a source emitting an optical signal OS and optical coupler that splits the incoming optical signal OS into two replicas, the first replica of the incoming optical signal OS is sent to the first optical hybrid circuit and the second replica of the incoming optical signal OS is sent to a wavelength recovery device WVLR, whose output is a continuous- waveform optical signal CW at the central wavelength of the incoming optical signal OS, which sends it to the second optical hybrid circuit. such that the optical signal OS is sampled within the first hybrid circuit and the continuous waveform optical signal CW is sampled in the second hybrid circuit, and a device BDADC comprising balanced photodetectors detecting optical signals at the output of the two optical hybrid circuits and an analog/digital converter ADC.

IPC 8 full level

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CPC (source: EP US)

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